

**Notice of Allowability**

Application No.

10/665,004

Examiner

Hoang V Nguyen

Applicant(s)

PACKER, MALCOLM J.

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed on 19 September 2003.
2. ☒ The allowed claim(s) is/are 1-33.
3. ☒ The drawings filed on 27 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 10/6/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
**HOANG V. NGUYEN**  
**PRIMARY EXAMINER**

*Allowable Subject Matter*

1. Claims 1-33 are allowed.
2. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, Vliegenthardt (USP 3,523,296) discloses an antenna assembly to be worn by a user. Vliegenthardt, however, fails to specifically teach a configuration comprising a dipole feed; a first dipole element connected and extending outwardly from the dipole feed in a first direction; a transmission line extending from the dipole feed in a second direction opposite the first direction; a flexible electrically conductive sleeve surrounding the transmission line and connected to and extending outwardly from the dipole feed to serve as a second dipole element and as a balun; and at least one fastener to removably fasten the antenna to a garment of the user.

Claims 2-12 are allowed for depending on claim 1.

Regarding claim 13, Vliegenthardt discloses an antenna assembly to be worn by a user. Vliegenthardt, however, fails to specifically teach a configuration comprising a dipole feed including a broadband matching network; a first dipole element connected and extending outwardly from the dipole feed in a first direction; a transmission line extending from the dipole feed in a second direction opposite the first direction; a flexible electrically conductive sleeve surrounding the transmission line and connected to and extending outwardly from the dipole feed to serve as a second dipole element and as a balun; and a noise filter coupled to the transmission line adjacent an end of the flexible electrically conductive sleeve opposite the dipole feed.

Claims 14-19 are allowed for depending on claim 13.

Regarding claim 20, Vliegenthardt discloses a communications system comprising a radio to be carried by a user; an antenna to be worn by the user and connected to the radio. Vliegenthardt, however, fails to specifically teach that the antenna having a configuration comprising a dipole feed; a first dipole element connected and extending outwardly from the dipole feed in a first direction; a transmission line extending from the dipole feed in a second direction opposite the first direction; a flexible electrically conductive sleeve surrounding the transmission line and connected to and extending outwardly from the dipole feed to serve as a second dipole element and as a balun; and at least one fastener to removably fasten the antenna to a garment of the user.

Claims 21-28 are allowed for depending on claim 20.

Regarding claims 29-33, none of the prior art of record, either taken singly or in combination, fairly teaches or suggests a method for making antenna comprising the steps of: coupling a first dipole element comprising a broadband matching network to and extend outwardly from a dipole feed in a first direction; coupling a transmission line to extend from the dipole feed in a second direction opposite the first direction; providing a flexible electrically conductive sleeve surrounding the transmission line and connected to and extending outwardly from the dipole feed to serve as a second dipole element and as a balun; and coupling a noise filter to the transmission line adjacent an end of the flexible electrically conductive sleeve opposite the dipole feed.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Patent 4,041,394 discloses a radio control transmitter to be worn by a user.
- Patent 6,325,238 discloses a vest antenna assembly.
- Patent 6,483,469 discloses a dipole antenna attached to a garment.
- Patent 6,680,707 discloses a garment antenna.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang V Nguyen whose telephone number is (571) 272-1825.

The examiner can normally be reached on Mondays-Fridays from 9:00 a.m. to 5:00 p.m..

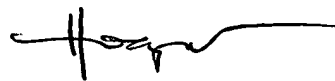
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Nguyen can be reached on (571) 272-1825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Hoang V. Nguyen', with a long horizontal flourish extending to the right.

**HOANG V. NGUYEN  
PRIMARY EXAMINER**